



Figure 1A
PAGE 1 of 2

REPLACEMENT SHEET
Title: Compositions Involving M-RIP, and Related Methods for
Screening for Anti-Hypertensive Agents and Uses Thereof
Applicant(s): Michael E. Mendelsohn et al.
Filing Date: November 17, 2003 Serial No.: 10/715,632
Customer No.: 21559

Human: 1	MSAAKENPCRKFQANIFNKSQCNCFKPREPHLLNDEDLTQAKPIYGGWLLLAPDGTDFD	60
Mouse: 1	MSAAKENPCRKFQANIFNKSQCNCFKPRE HLLNDEDLTQAKPIYGGWLLLAPDGTDFD	60
Human: 61	NPVHRSRKWQRRFFILYEHGLLRYALDEMPTTLPGGTINMNQCTDVVDGEGRTGQKFSLC	120
Mouse: 61	NPVHRSRKWQRRFFILYEHGLLRYALDEMPTTLPGGTINMNQCTDVVDGE RTGQKFSLC	120
Human: 121	ILTPEKEHFIRAETKEIVSGWLEMLMVYPRTNKQNKQKKRQKVEPPTPQEPGPAKVAVTSS	180
Mouse: 121	ILTPDKEHFIRAETKEIISGWLEMLMVYPRTNKQNKQKKRQKVEPPTPQEPGPAKMAVTSS	180
Human: 181	S--SSSSSSIPSAEKVPTTKSTLWQEEMRTKDQPDGSSLSPAQSPSQSQPPAASSLREP	238
Mouse: 181	S +S SSSSIPSAEKVPTTKSTLWQEEMR KDQPDG+SLSPAQSPSQSQPPAA + REP	240
Human: 239	GLESKEEESAMSSDRMDCGRKVRVESGYFSLEKTKQDLKAEQQLPPLSPPSPSTPNHR	298
Mouse: 241	GLESKE+ES +S DR+D GRKVRVESGYFSLEK QDL+AEQ LPP LSPPSPSTP+ R	299
Human: 299	RSQVIEKFEALDIEKAEHMETNA-VGSPSSDTRQGRSEKRAFPRKRDFNEAPPAPLPD	357
Mouse: 300	RSQVIEKFEALDIEKAEHMETN + +PSSDTRQGRSE+RA PRKRDF +EAP APL D	359
Human: 358	ASASPLSPHRRAKSLDRRSTEPSVTPDLLNFKKGWLTQYEDGQWKKHWFVLADQSLRYY	417
Mouse: 360	A PLSPHRRAKSLDRRSTE S+TPDLLNFKKGWLTQYEDGQWKKHWFVLADQSLRYY	417
Human: 418	RDSVAEEAADLDGEIDLACVDTEYPVQRNYGFQIHTKEGEFTLSAMTSGIRRNWIQTI	477
Mouse: 418	RDSVAEEAADLDGEINLSTCYDVTEYPVQRNYGFQIHTKEGEFTLSAMTSGIRRNWIQTI	477
Human: 478	MKHVHPTTAPDVTSSLPEEKKNSSCSFETCPRPTEKQEAELGEPDPEQKTSRARERRREG	537
Mouse: 478	MKHV P +APDVTSSLPE KNKS+ SFETC R TEKQAE GEPDPEQK SRARERRREG	536
Human: 538	RSKTFDWAEFRPIQQALAQERVGGVGPADTHEPLRPEAESGELERERARRREERRKRFGM	597
Mouse: 537	RSKTFDWAEFRPIQQALAQER VG +D+ +P EAE GELERERARRREE RKRFGM	596
Human: 598	LDATDGPGETAALRMEVDRSPGL-PMSDLKTHNVHVEIEQRWHQVETTPLRREEKQVPIA	656
Mouse: 597	LD DGPG ED ALRM++DRSPGL DLKT NVHVEIEQRWHQVETTPLRREEKQVPIA	656
Human: 657	PVHLSSDGGDRLSTHELTSLLEKELEQSQKEASDLLEQNRLLDQLRVALGREQSAREG	716
Mouse: 657	P+HLS ED +RLSTHELTSLLEKELEQSQKEASDLLEQNRLLDQLRVALGREQSAREG	716
Human: 717	YVLQATCERGFAAMEETHQKKIEDLQRQHORELEKLREEKDRLAEETAATISAIEAMKN	776
Mouse: 717	YVLQATCERGFAAMEETHQKKIEDLQRQHORELEKLREEKDRLAEETAATISAIEAMKN	776
Human: 777	AHREEMERELEKSQRSQISSVNSDVEALRRQYLEELQSVQRELEVLSQYSQKCLENAH	836
Mouse: 777	AHREEMERELEKSQRSQISS+NSD+EALRRQYLEELQSVQRELEVLSQYSQKCLENAH	836

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Figure 1A**PAGE 2 of 2**

Human: 837 AQALEAERQALRQCQRENQELNAHNQELNNRLAAEITRLRTLTLTGDDGGGEATGSPLAQGK 896
AQALEAERQALRQCQRENQELNAHNQELNNRLAAEITRLRTLTLTGDDGGGE+TG PL QGK
Mouse: 837 AQALEAERQALRQCQRENQELNAHNQELNNRLAAEITRLRTLTLTGDDGGGESTGLPLTQGK 896

Human: 897 DAYELEVLLRVKESEIQYLKQEISSLKDELQTALRDKKYASDKYKDIYTELSIAKAKADC 956
DAYELEVLLRVKESEIQYLKQEISSLKDELQTALRDKKYASDKYKDIYTELSIAKAKADC
Mouse: 897 DAYELEVLLRVKESEIQYLKQEISSLKDELQTALRDKKYASDKYKDIYTELSIAKAKADC 956

Human: 957 DISRLKEQLKAATEALGEKSPDSATVSGYDIMKSKSNPDFLKKDRSCVTRQLRNIRSKSV 1016
DISRLKEQLKAATEALGEKSP+ TVSGYDIMKSKSNPDFLKKDRSCVTRQLRNIRSKSV
Mouse: 957 DISRLKEQLKAATEALGEKSPEGTTVSGYDIMKSKSNPDFLKKDRSCVTRQLRNIRSKSV 1016

Human: 1017 IEQVSWDT 1024
IEQVSWD
Mouse: 1017 IEQVSWDN 1024

Figure 1B

Yeast 2-Hybrid clones

Clone 6

539

1024

Clone 11

703

1024

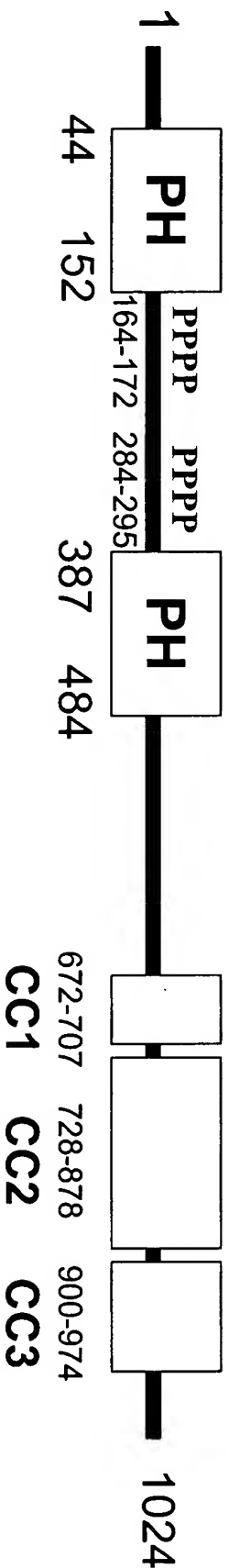


FIGURE 1C

SEQ ID NO: 19

ATGTCGGCAGCCAAGGAGAACCCTGTCAGGAAATTCAGGCCAACATCTTCAACAAGAGCAAGTGTCTAG
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GGCGGTTGGCTGTCTCTGGCTCCAGATGGGACCGACTTTGACAACCCAGTGACCCGGTCTCGGAAATGG
CAGCGACGGTTCTTCATCCTTTACGAGCACGGCCTCTTGCGCTACGCCCTGGATGAGATGCCCACGACC
CTTCTCAGGGCACCATCAACATGAACAGTGACACAGATGTGGTGGATGGGGAGGGCCGCACGGGCCAG
AAGTTCTCCCTGTGTATTCTGACGCCTGAGAAGGAGCATTTTCATCCGGGCGGAGACCAAGGAGATCGTC
AGTGGGTGGCTGGAGATGCTCATGGTCTATCCCCGGACCAACAAGCAGAATCAGAAGAAGAAACGGAAA
GTGGAGCCCCCACACCACAGGAGCCTGGGCCTGCCAAGGTGGCTGTTACCAGCAGCAGCAGCAGCAGC
AGCAGCAGCAGCATCCCCAGTGCTGAGAAAGTCCCCACCACCAAGTCCCACTCTGGCAGGAAGAAATG
AGGACCAAGGACCAGCCAGATGGCAGCAGCCTGAGTCCAGCTCAGAGTCCAGCCAGAGCCAGCCTCCT
GCTGCCAGTCTCCTGCGGGAACCTGGGCTAGAGAGCAAGAAGAGGAGAGCGCCATGAGTAGCGACCCG
ATGGACTGTGGCCGCAAAAGTCCGGGTGGAGAGCGGCTACTTCTCTCTGAGAAAGACCAACAGGACTTG
AAGGCTGAAGAACAGCAGCTGCCCCCGCCGCTCTCCCCTCCCAGCCCCAGACCCCCAACACAGGAGG
TCCCAGGTGATTGAAAAGTTTGAGGCCTTGGACATTGAGAAGGCAGAGCACATGGAGACCAATGCAGTG
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TTCACCAATGAAGCCCCCCCAGCTCCTCTCCAGACGCCTCGGCTTCCCCCTGTCTCCACACCGAAGA
GCCAAGTCACTGGACAGGAGGTCCACGGAGCCCTCCGTGACGCCCGACCTGCTGAATTTCAAGAAAGGC
TGGCTGACTAAGCAGTATGAGGACGGCCAGTGGAAAGAAACACTGGTTTGTCTCGCCGATCAAAGCCTG
AGATACTACAGGGATTGAGTGGCTGAGGAGGCAGCCGACTTGGATGGAGAAATTGACTTGTCCGCATGT
TACGATGTCACAGATATCCAGTCCAGAGAACTATGGCTTCCAGATACATACAAAGGAGGGCGAGTTT
ACCTGTTCGGCCATGACATCTGGGATTTCGGCGGAAGTGGATCCAGACCATCATGAAGCACGTGCACCCG
ACCACTGCCCCGGATGTGACCAGCTCGTTGCCAGAGGAAAAAACAAGAGCAGCTGCTCTTTTGAGACC
TGCCCCGAGGCCTACTGAGAAGCAAGAGGCAGAGCTGGGGGAGCCGGACCCCTGAGCAGAAGACGAGCCGC
GCACGGGAGCGGAGGCGAGAGGGCCGCTCCAAGACCTTTGACTGGGCTGAGTTCGTCCCATCCAGCAG
GCCCTGGCTCAGGAGCGGGTGGGCGGCGTGGGGCCTGCTGACACCCACGAGCCCCCTGCGCCCTGAGGCG
GAGTCTGGGGAGCTGGAGCGGGAGCGTGCACGGAGGCGGGAGGAGCGCCGCAAGCGCTTCGGGATGCTC
GACGCCACAGACGGGCCAGGCACTGAGGATGCAGCCCTGCGCATGGAGGTGGACCGGAGCCCAGGGCTG
CCTATGAGCGACCTCAAAACGCATAACGTCCACGTGGAGATTGAGCAGCGGTGGCATCAGGTGGAGACC
ACACCTCTCCGGGAAGAGAAGCAGGTGCCCATCGCCCCCGTCCACCTGTCTTCTGAAGATGGGGGTGAC
CGGCTCTCCACACACGAGCTGACCTCTCTGCTCGAGAAGGAGCTGGAGCAGAGCCAGAAGGAGGCCTCA
GACCTTCTGGAGCAGAACCGGCTCCTGCAGGACCAGCTGAGGGTGGCCCTGGGCCGGGAGCAGAGCGCC
CGTGAGGGCTACGTGCTGCAGGCCACGTGCGAGCGAGGGTTTGAGCAATGGAAGAAACGCACCAGAAG
AAGATTGAAGATCTCCAGAGGCAGCACCAGCGGAGCTAGAGAACTTCGAGAAGAGAAAGACCGCCTC
CTAGCCGAGGAGACAGCGGCCACCATCTCAGCCATCGAAGCCATGAAGAACGCCCCACGGGAGGAAATG
GAGCGGGAGCTGGAGAAGAGCCAGCGGTCCCAGATCAGCAGCGTCAACTCGGATGTTGAGGCCCTGCGG
CGCCAGTACCTGGAGGAGCTGCAGTCCGTGCAGCGGAACTGGAGGTCCTCTCGGAGCAGTACTCGCAG
AAGTGCCCTGGAGAATGCCCATCTGGCCCAGGCGCTGGAGGCCGAGCGGCAGGCCCTGCGGCAGTGCCAG
CGTGAGAACCAGGAGCTCAATGCCACAACCAGGAGCTGAACAACCGCCTGGCTGCAGAGATCACACGG
TTGCGGACGCTGCTGACTGGGGACGGCGGTGGGAGGCCACTGGGTACCCCTTGACAGGGCAAGGAT
GCCTATGAACTAGAGGTCTTATTGCGGGTAAAGGAATCGGAAATACAGTACCTGAAACAGGAGATTAGC
TCCCTCAAGGATGAGCTGCAGACGGCACTGCGGGACAAGAAGTACGCAAGTGACAAGTACAAAGACATC
TACACAGAGCTCAGCATCGCGAAGGCTAAGGCTGACTGTGACATCAGCAGGTTGAAGGAGCAGCTCAAG
GCTGCAACGGAAGCACTGGGGGAGAAGTCCCCTGACAGTGCCACGGTGTCCGGATATGATATAATGAAA
TCTAAAAGCAACCTGACTTCTTGAAGAAAGACAGATCCTGTGTACCCCGGCAACTCAGAAACATCAGG
TCCAAGTCCGTAATTGAGCAGGTCTCGTGGGATACCTGA

Figure 2A

Anti-M-RIP

M-RIP -
+ COS7



Figure 2B

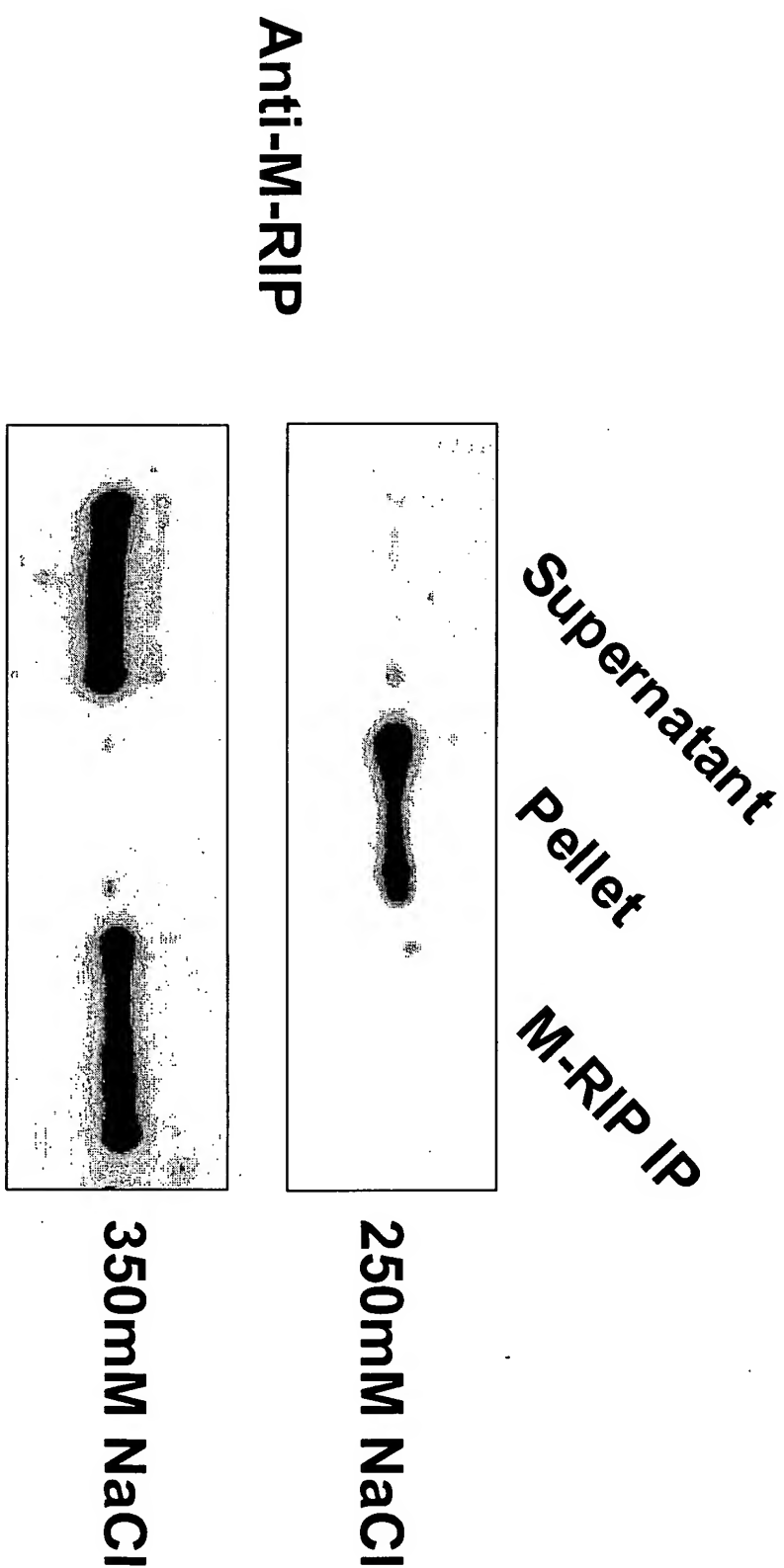
AoSMC, P18
CaSMC, P3



113

176

Figure 2C



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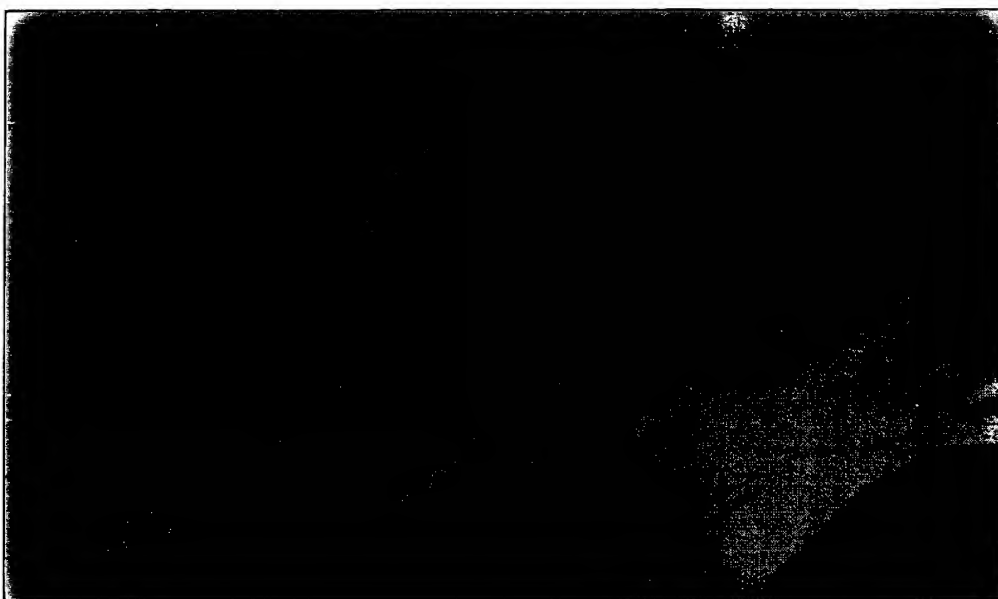
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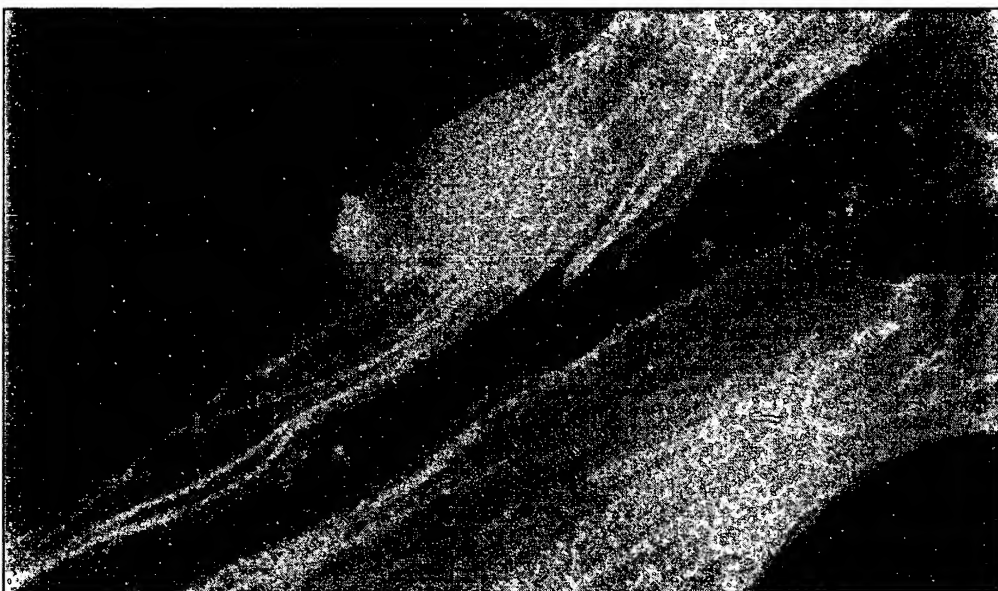
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Figure 2D

Anti-M-RIP



Phalloidin



Overlay



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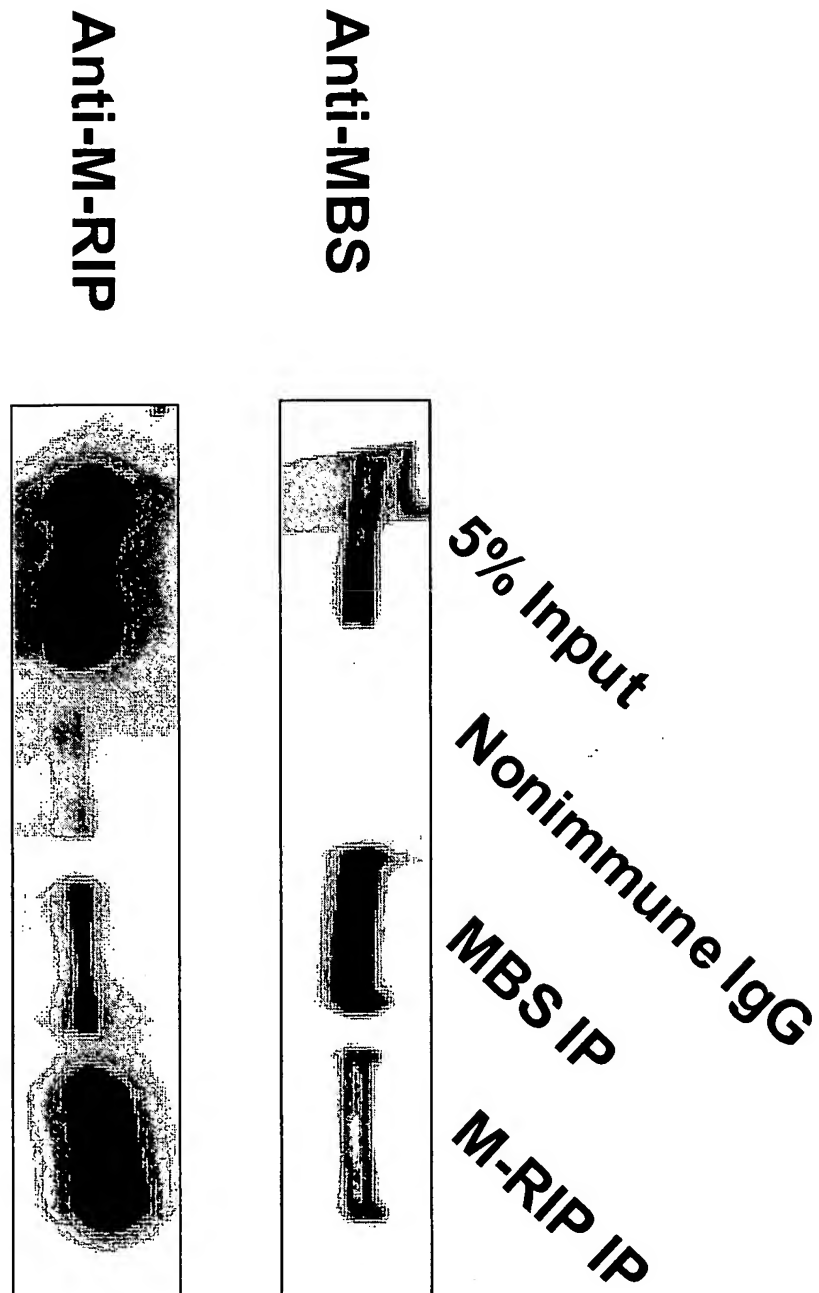
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Figure 3A



REPLACEMENT SHEET

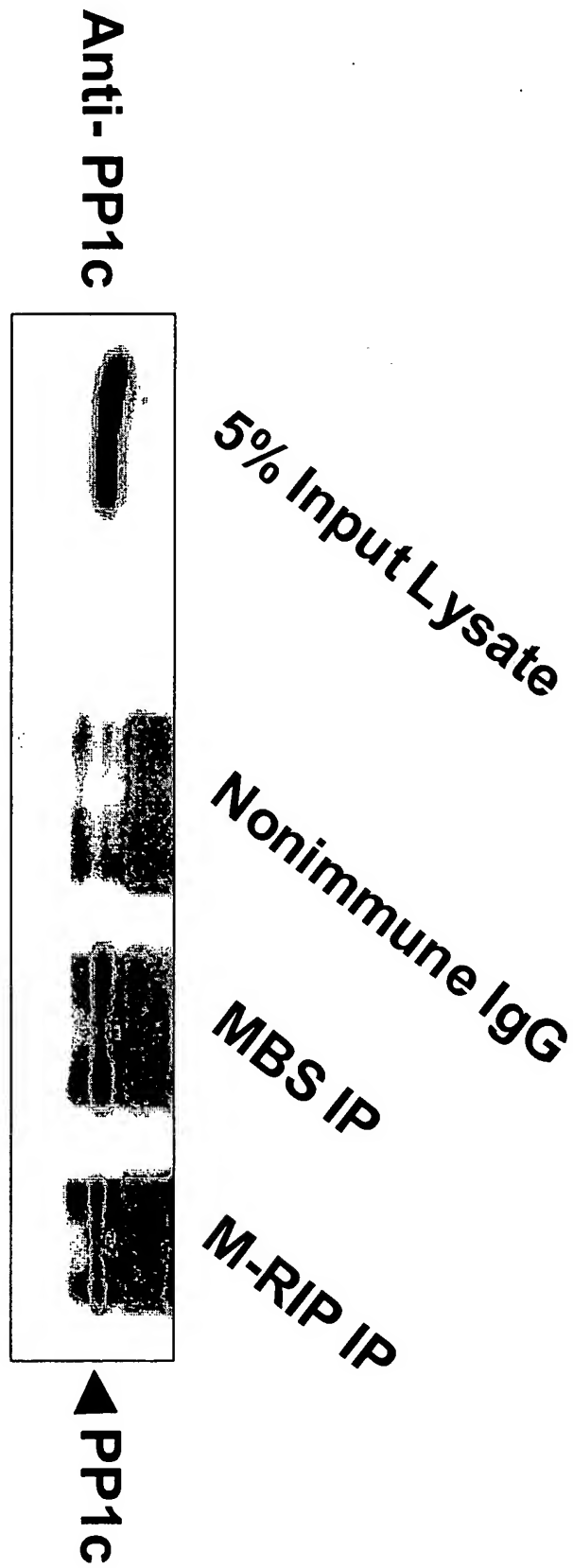
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Figure 3B



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Figure 3C

Anti-cGK



5% Input Lysate

Nonimmune IgG

cGK IP

M-RIP IP

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Figure 4A

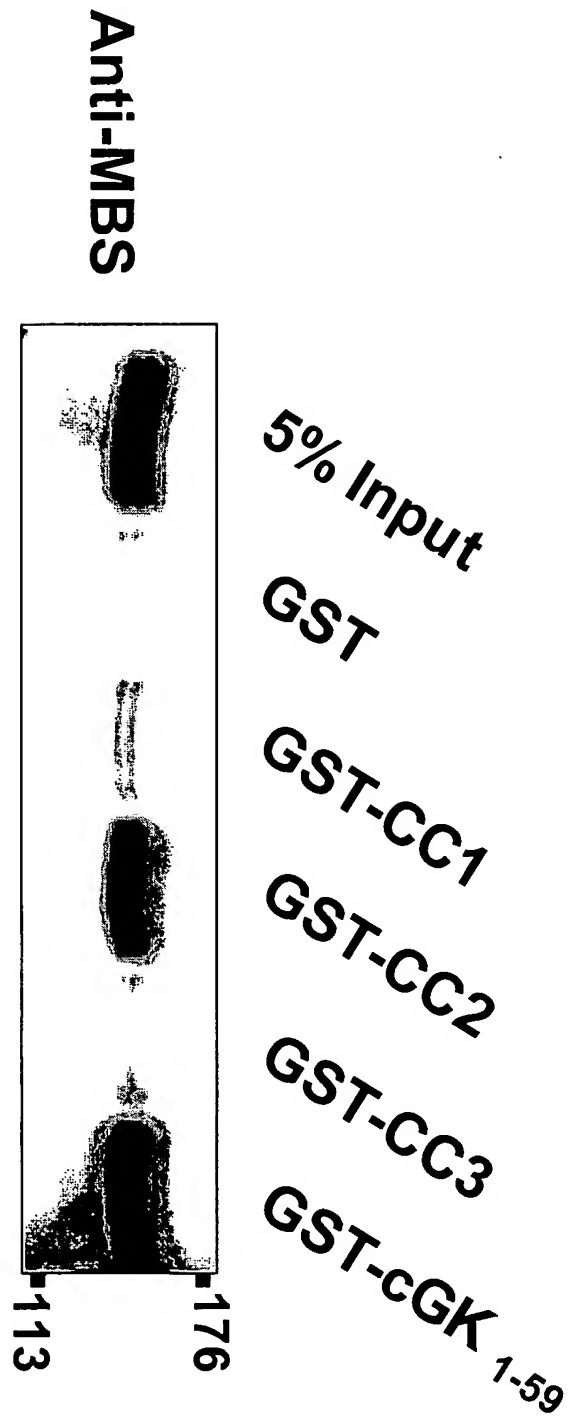
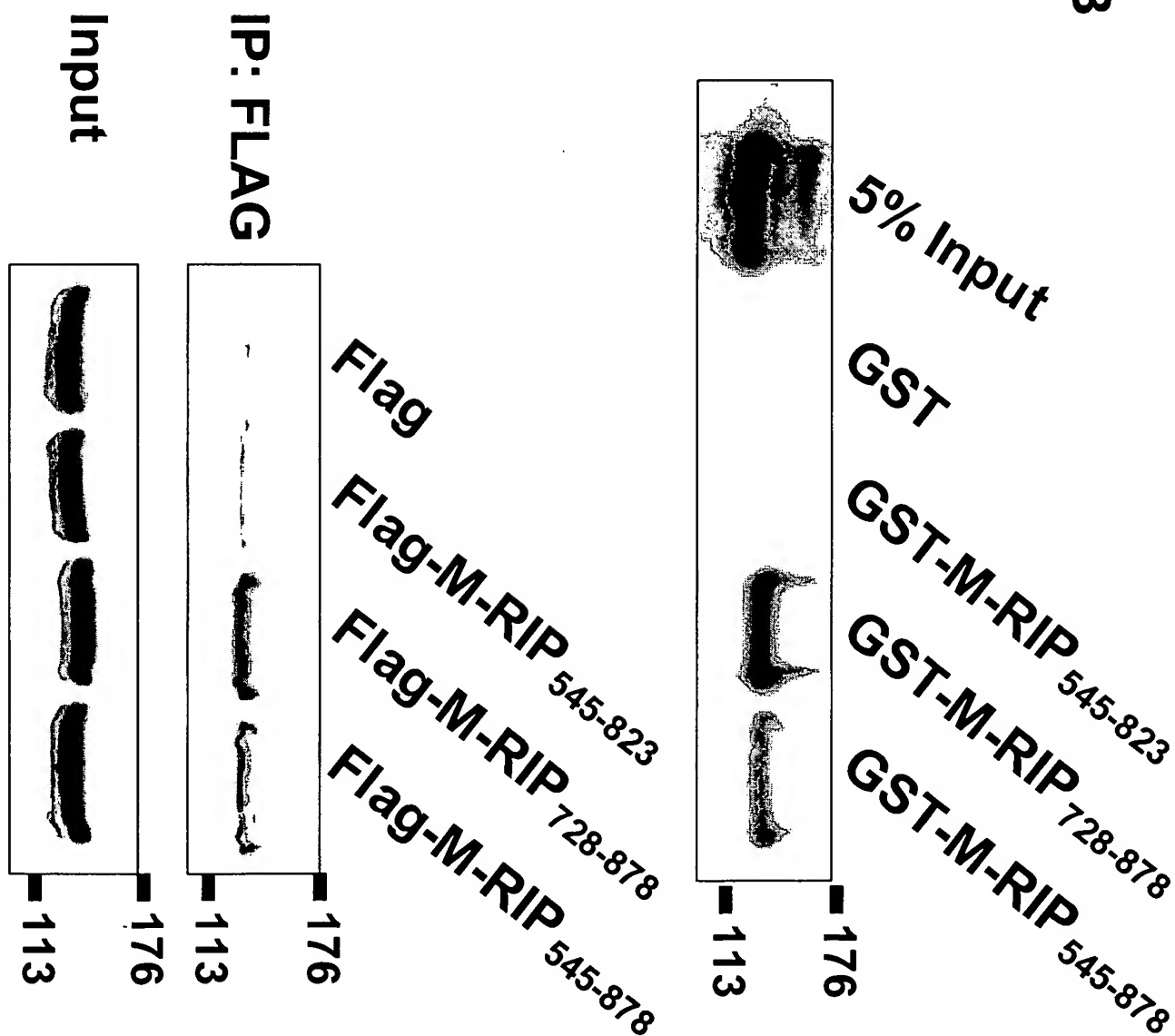
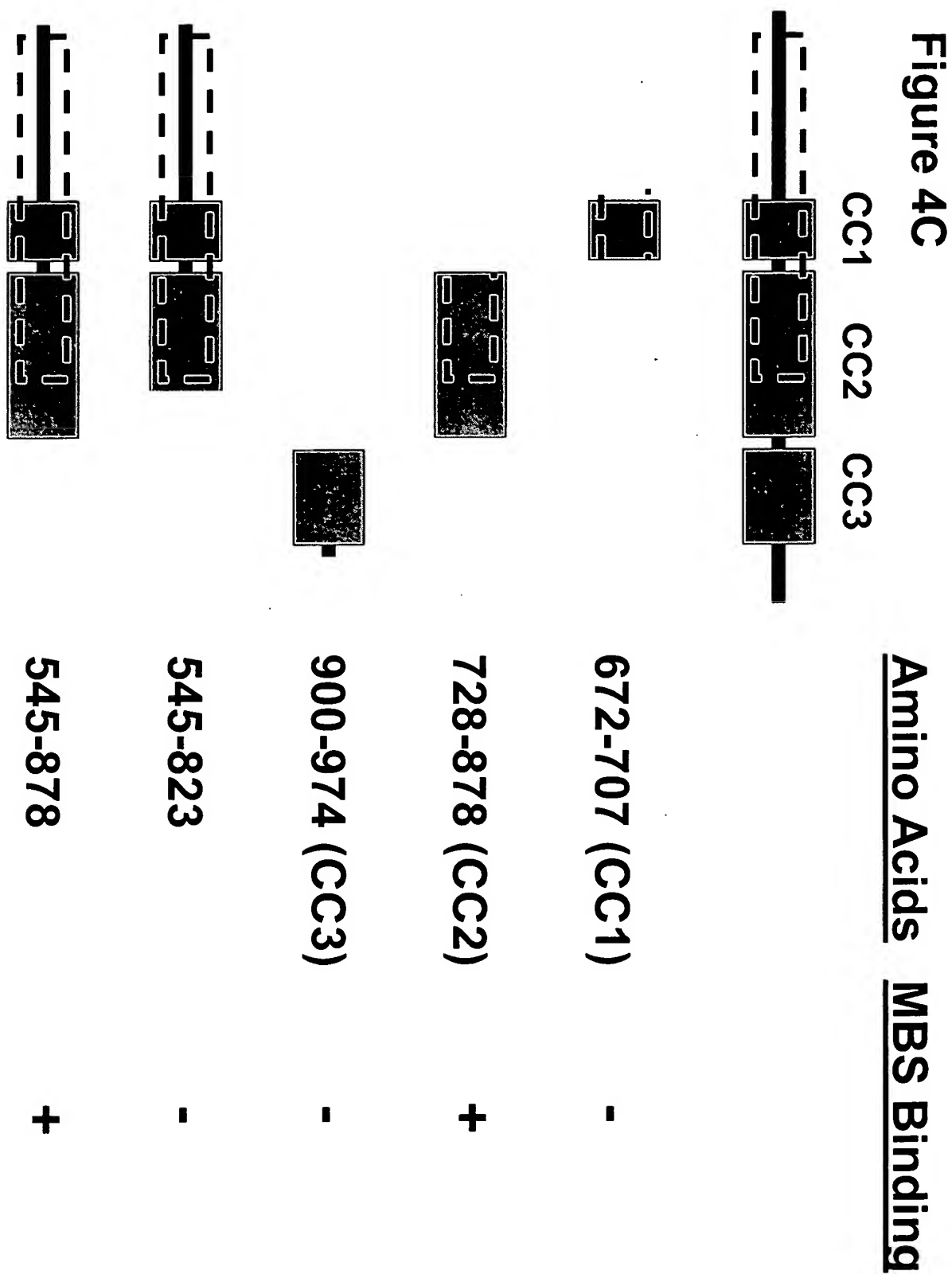


Figure 4B

Anti-MBS





REPLACEMENT SHEET

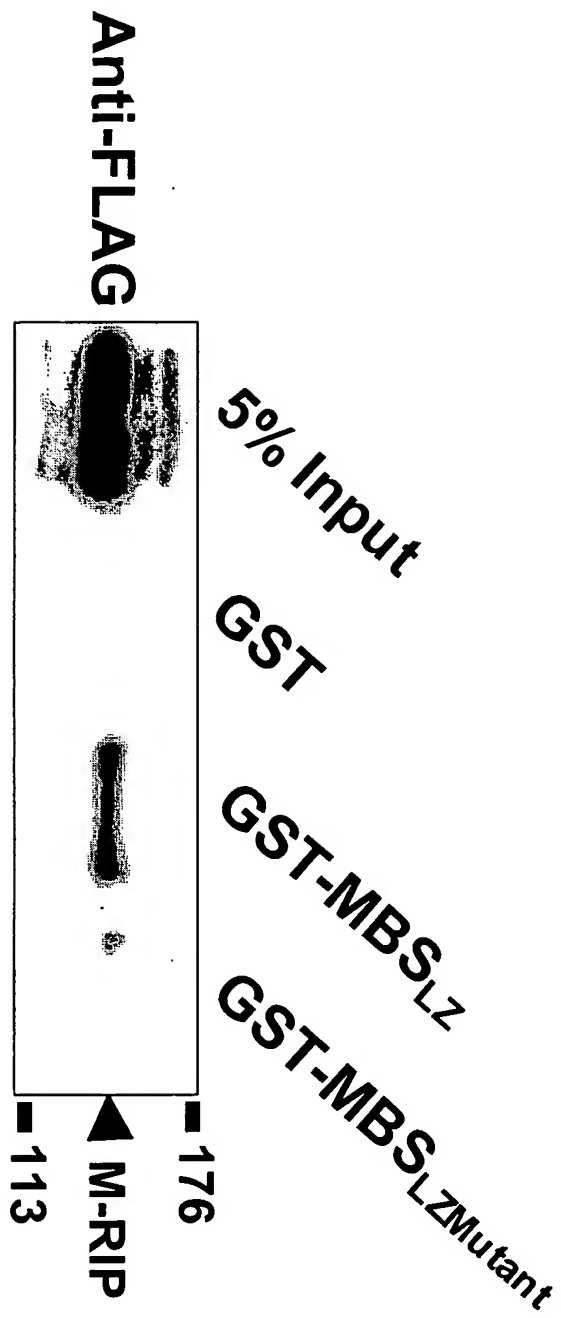
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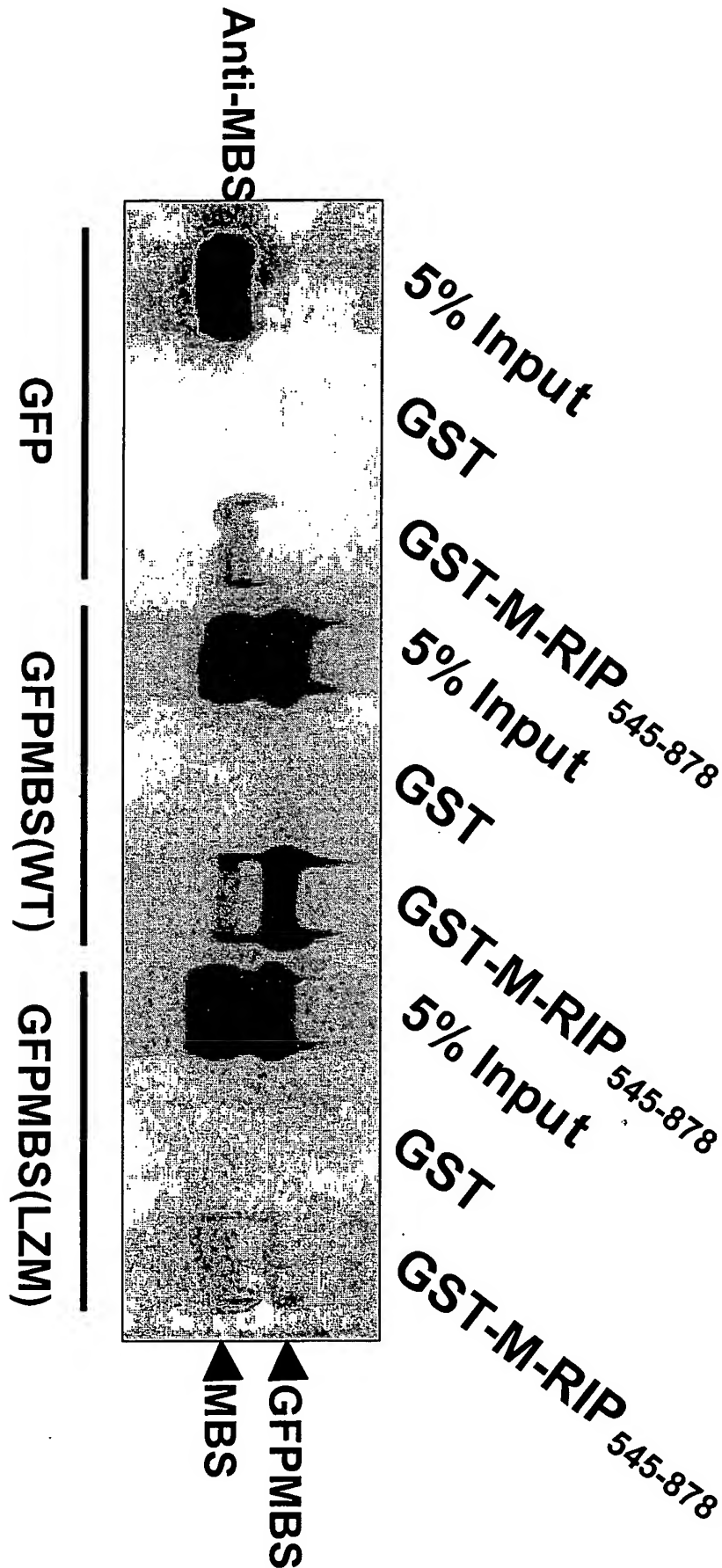
Figure 4D



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Figure 4E



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Figure 4F

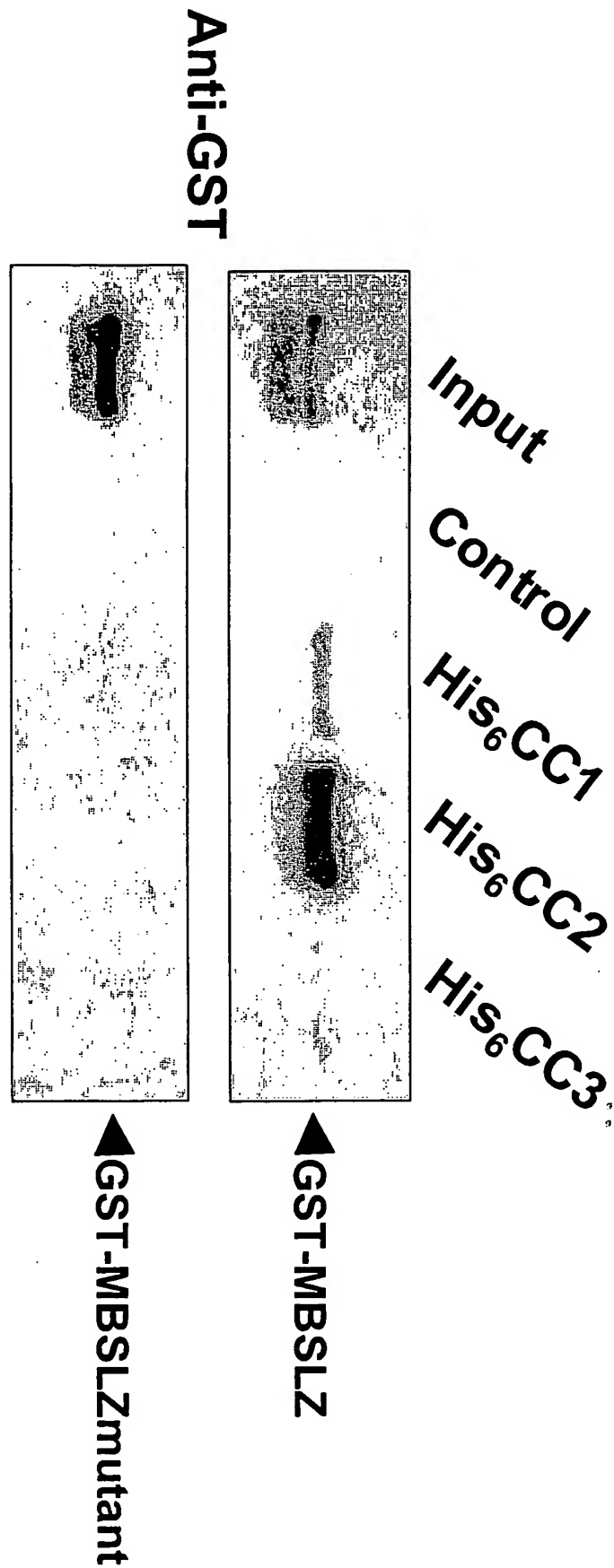


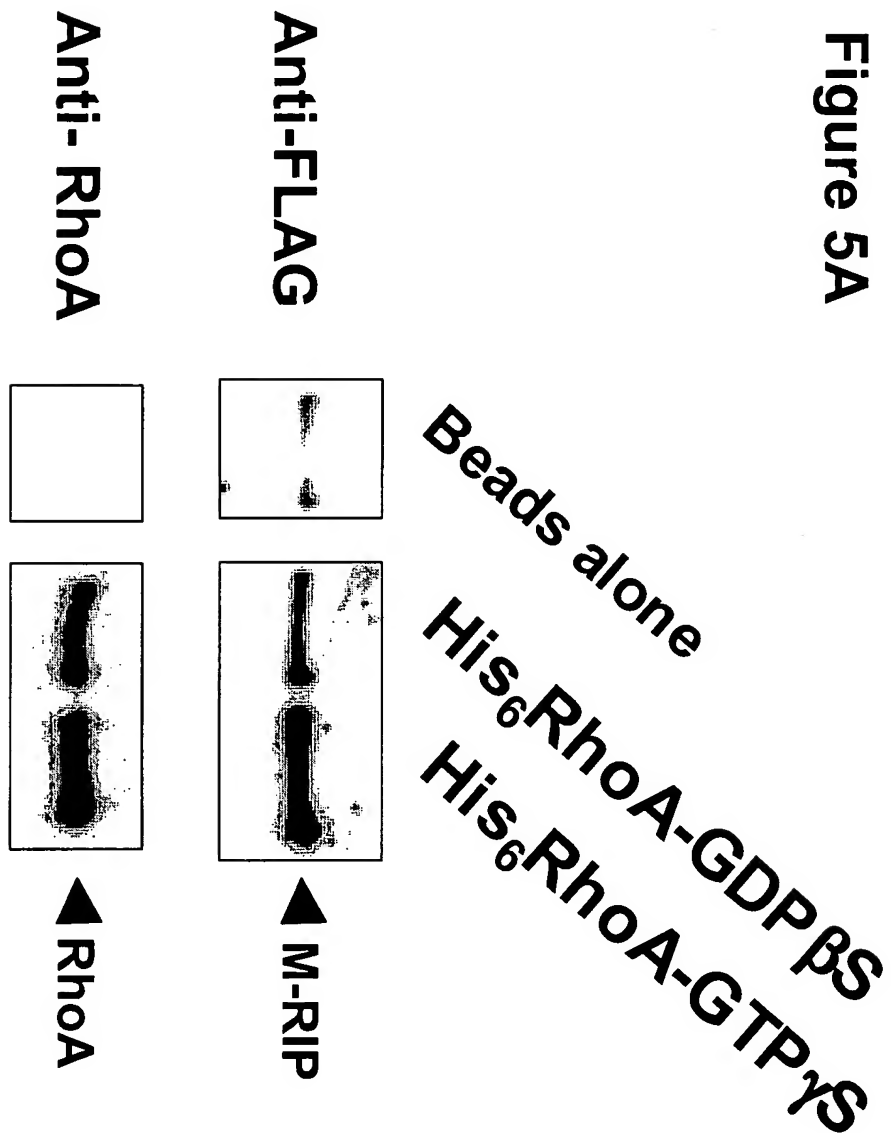
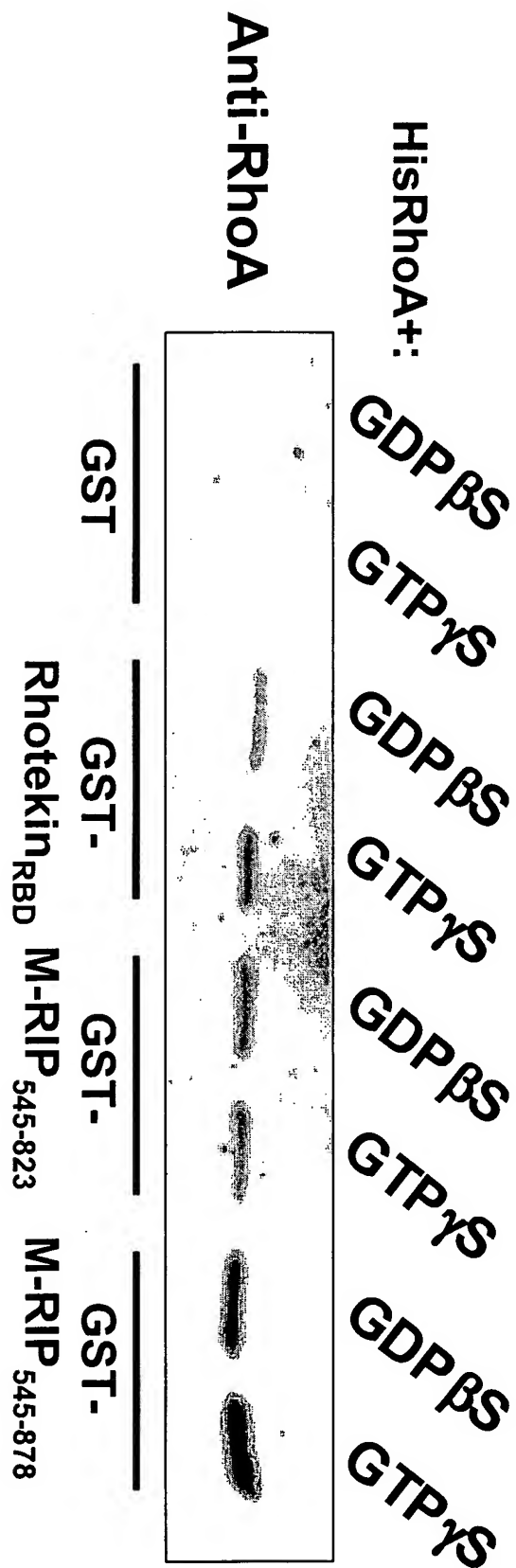
Figure 5A

Figure 5B



REPLACEMENT SHEET

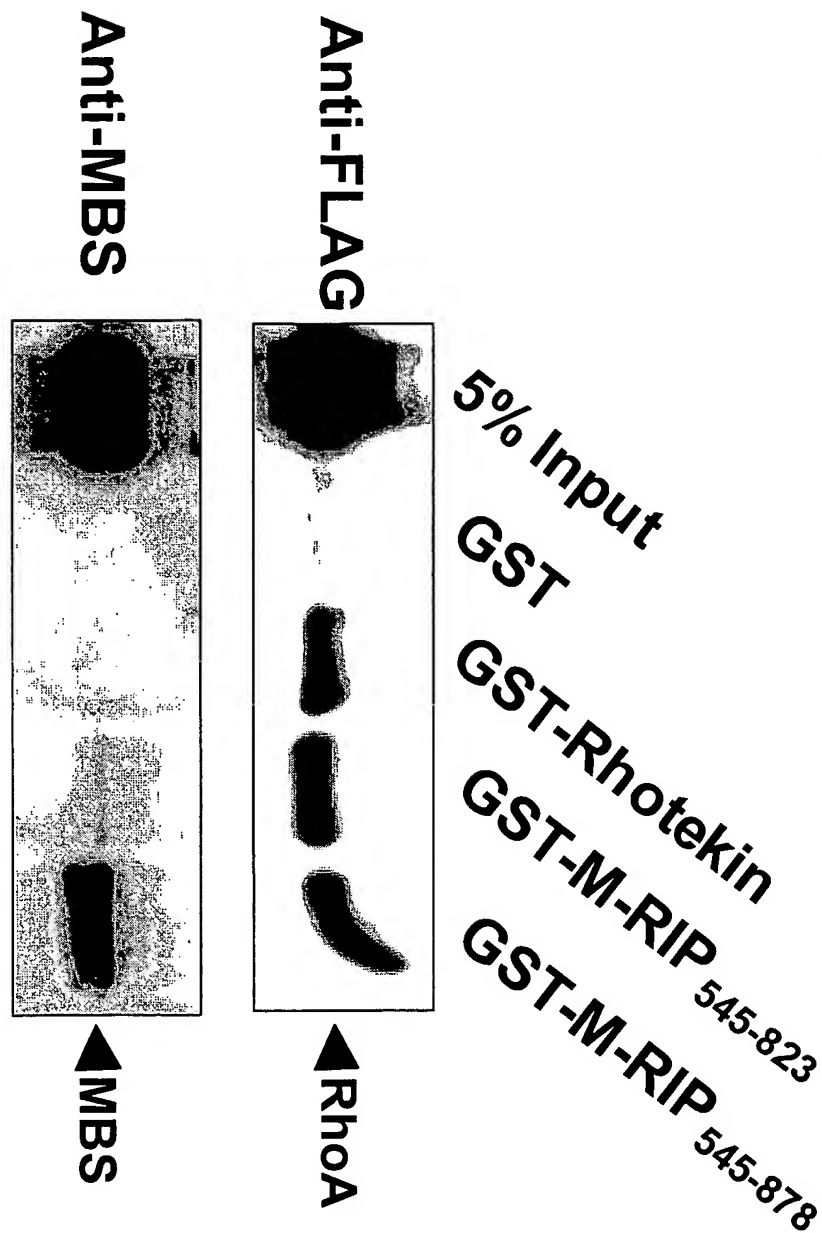
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Figure 5C



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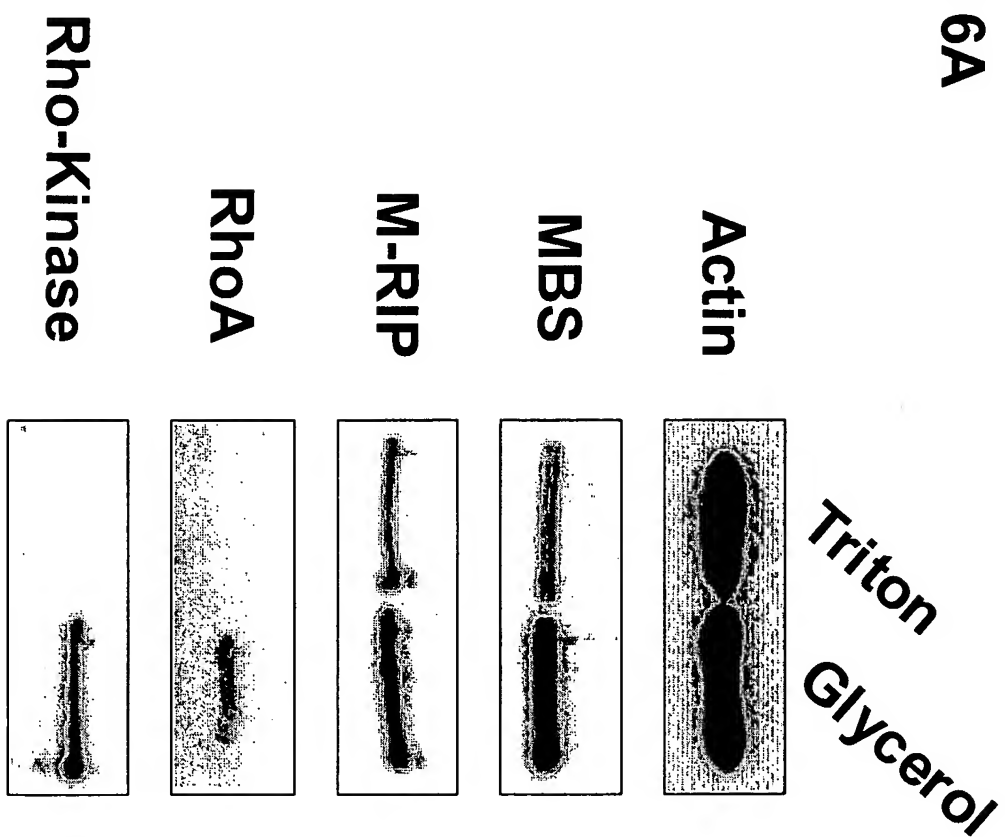
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Figure 6A



REPLACEMENT SHEET

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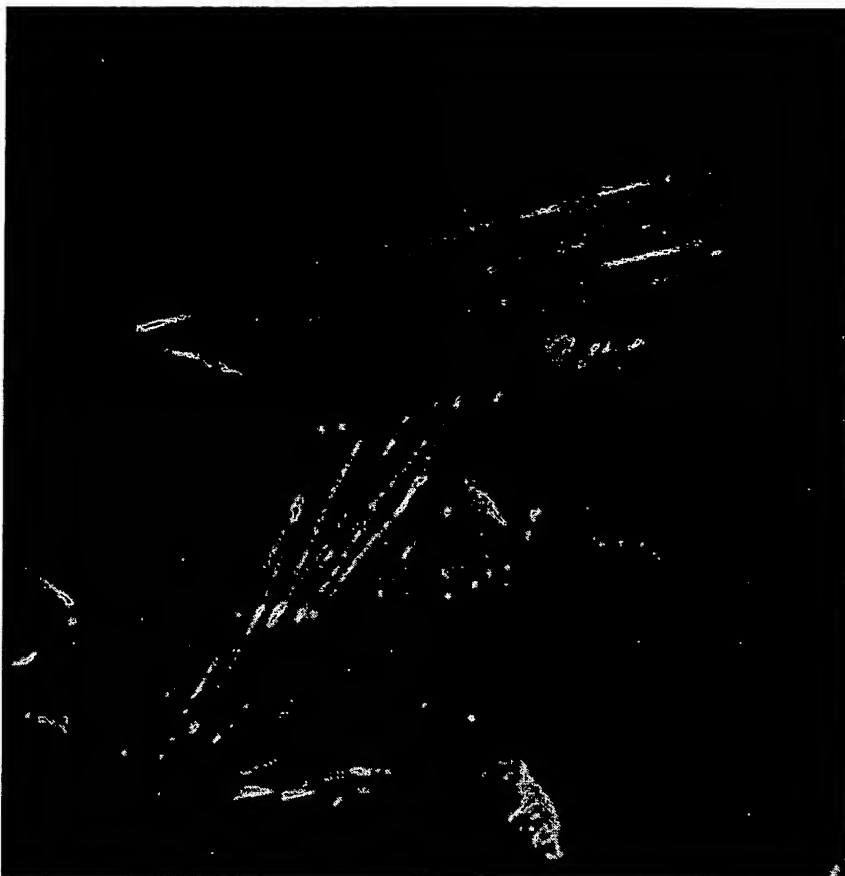
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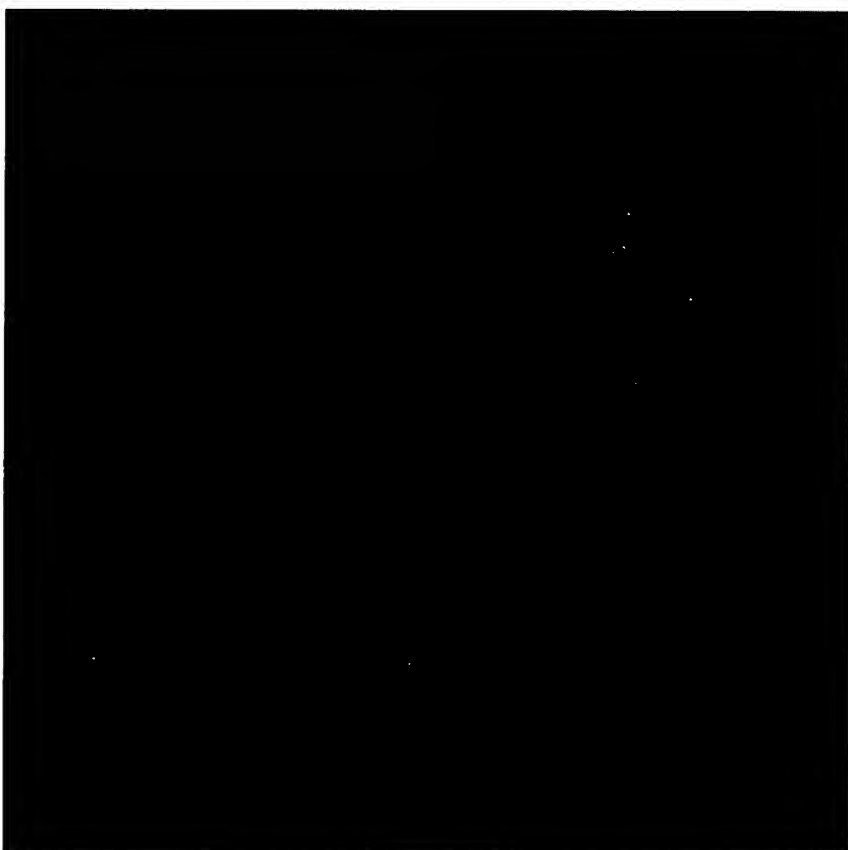
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Figure 6B, top

Phalloidin



M-RIP



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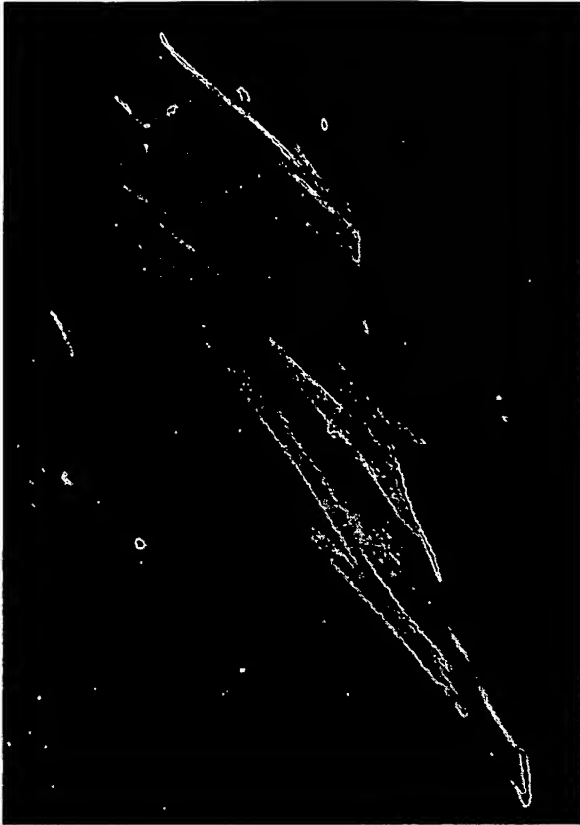
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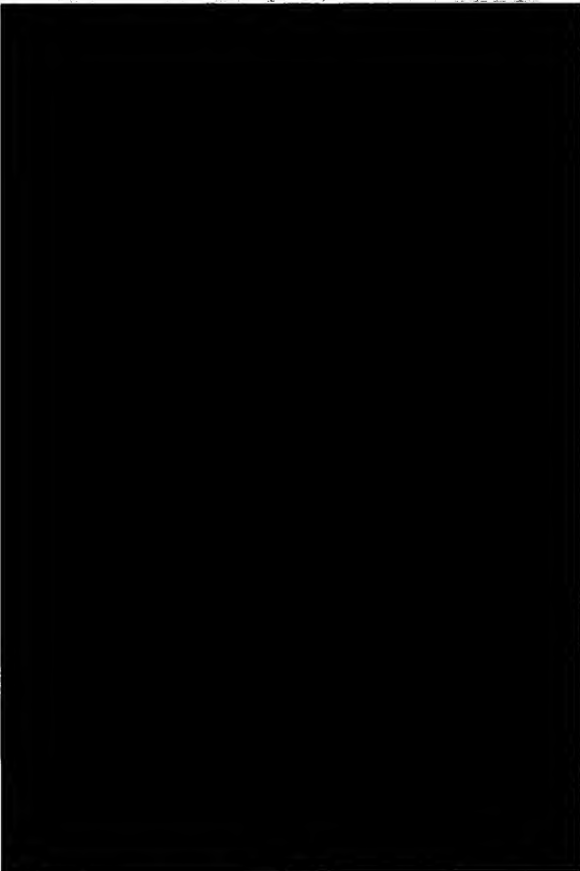
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Figure 6B, middle

Phalloidin



MBS



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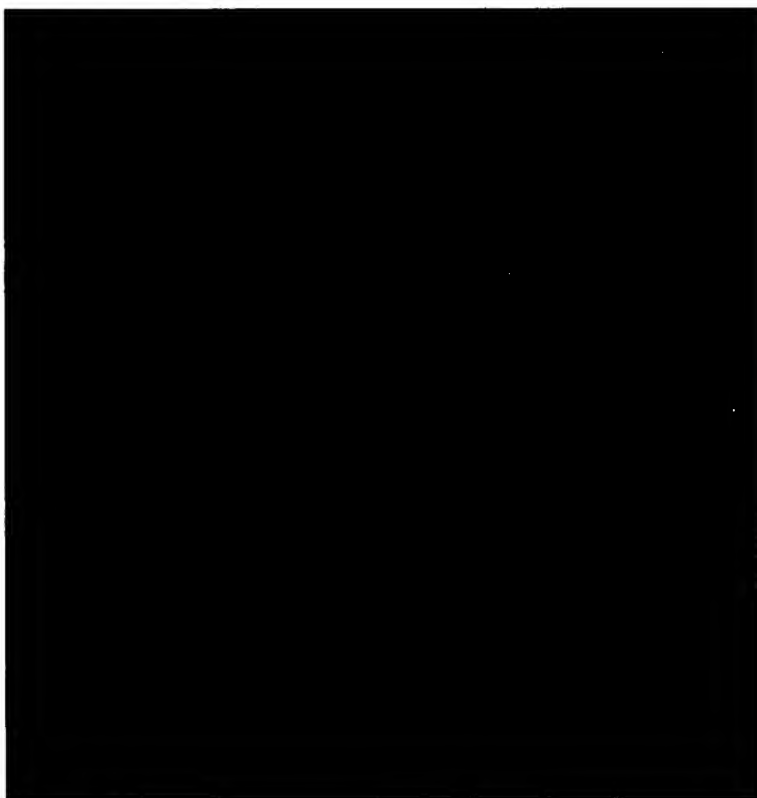
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Figure 6B, bottom

Phalloidin



RhoA



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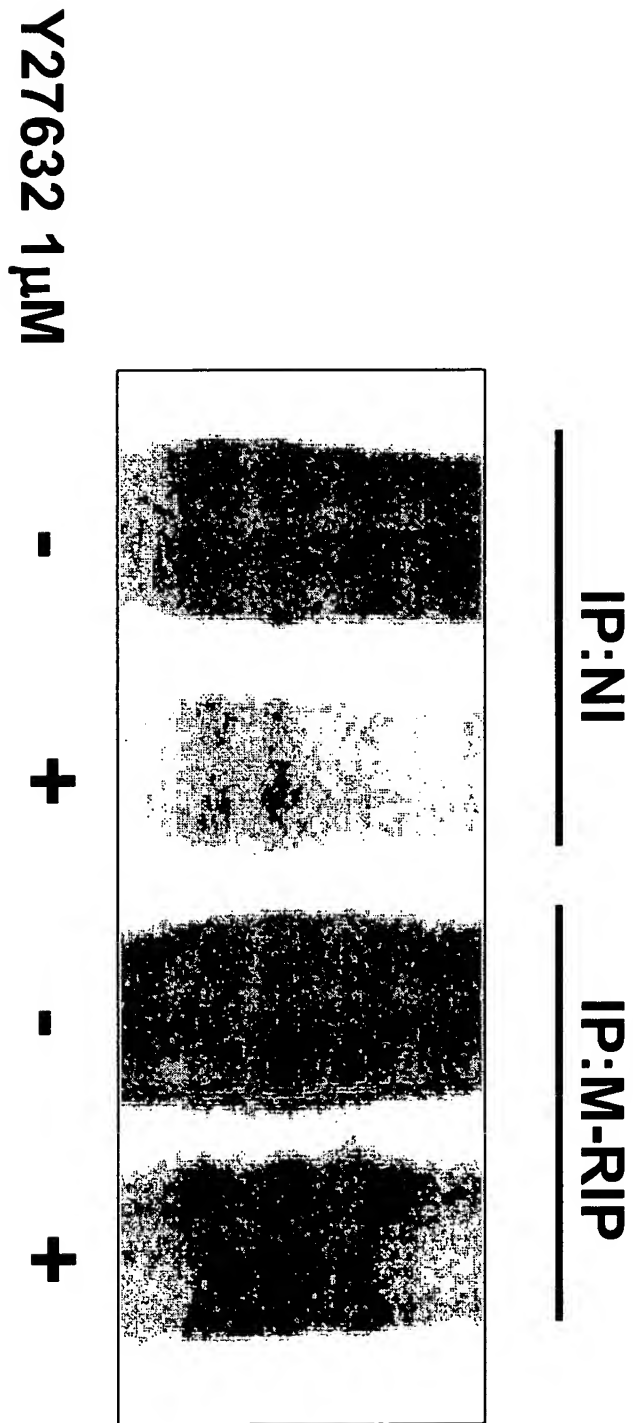
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Figure 6C



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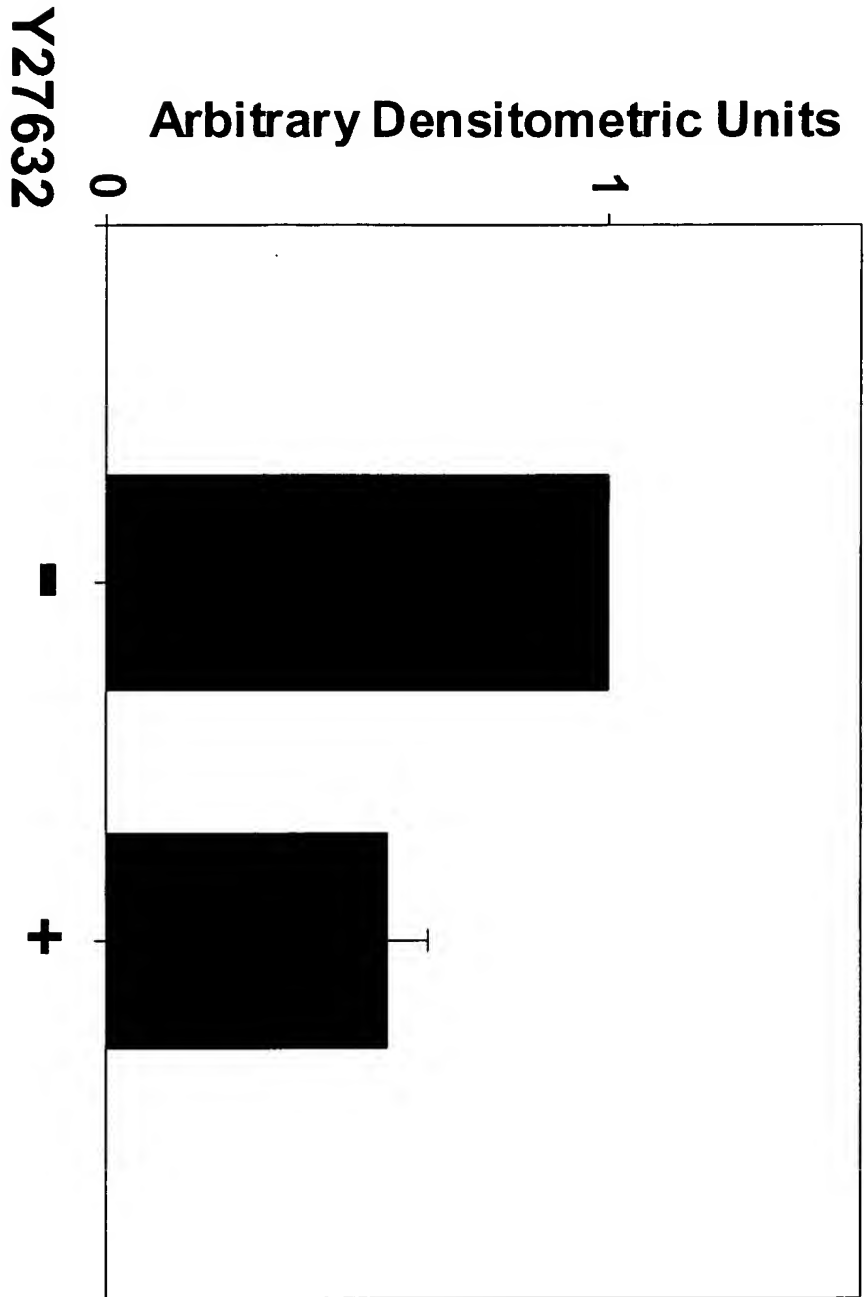
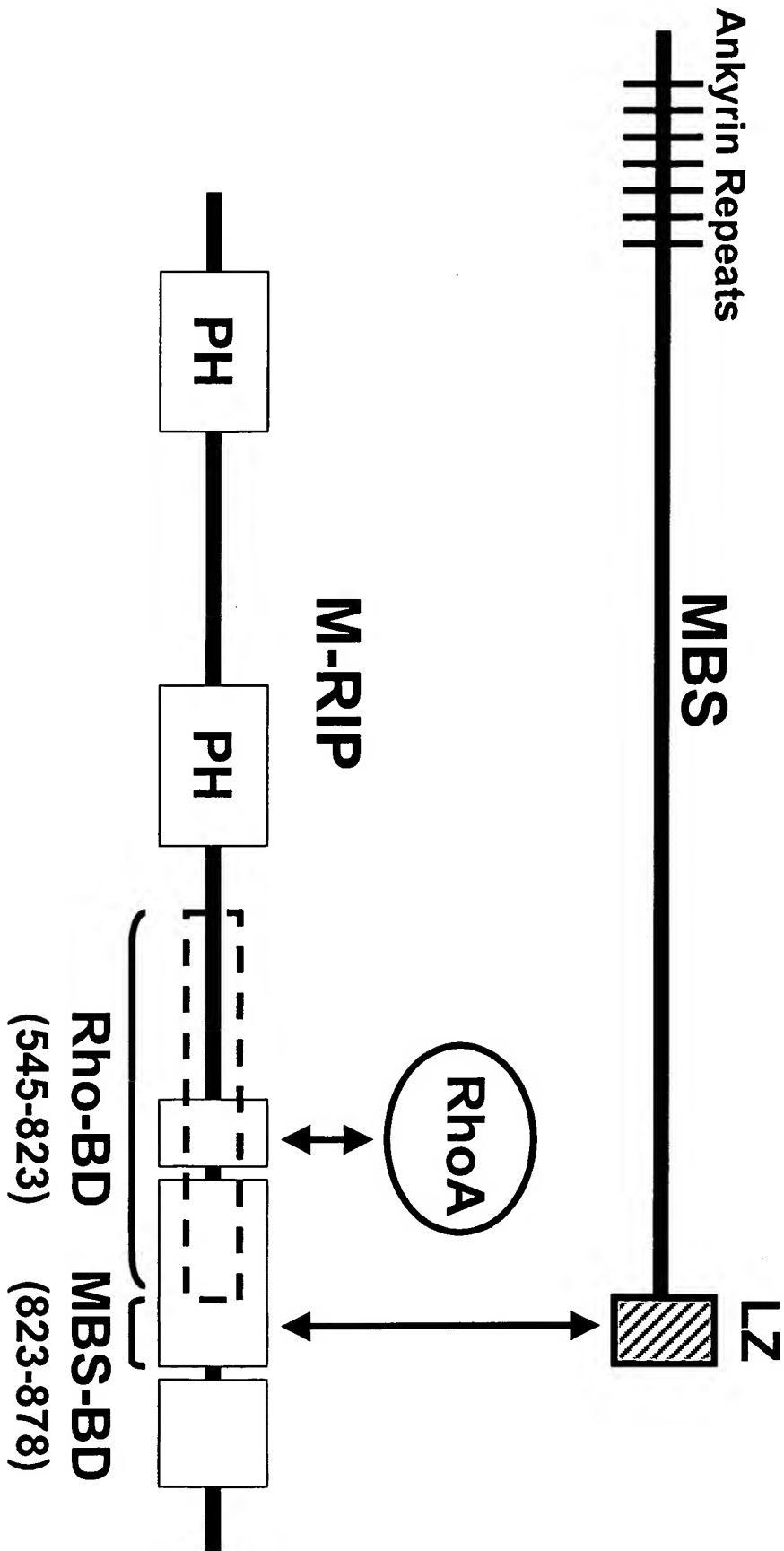


Figure 6D

Figure 7



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